ABSTRACT OF THE DISCLOSURE

A magneto-optical readout head for reading out magnetically stored data has a high optical quality substrate and a transducer applied to the substrate formed by a Faraday rotator and a Kerr rotator, with the Kerr rotator facing the magnetic storage medium. The substrate can be provided with a shape for magnifying the domain structures of the Kerr rotator and the Faraday rotator. Linearly polarized light is passed through the substrate and the polarization vector thereof is rotated by the Faraday rotator upon passage through the Faraday rotator and the light is reflected at the Kerr rotator, and is provided with an additional rotation upon reflection. Upon passing back through the Faraday rotator, the polarization vector of the polarized light is further rotated, so that the emerging light has a polarization vector which has been rotated by twice the Faraday coefficient of the Faraday rotator times the thickness of the Faraday rotator, plus the Kerr rotation coefficient of the Kerr rotator positively added thereto. ~~The amount of rotation which takes place by the effects of the Faraday rotator and the Kerr rotator is dependent on the magnetic field in each of those rotators, which is produced by the magnetically stored data on the magnetic storage medium.~~ The light emerging from the magneto-optical readout head is analyzed as to the amount of rotation of the polarization vector, thereby identifying the readout data. Because the amount of rotation of the polarization vector is enhanced by the Faraday rotator in combination with the Kerr rotator, magneto-optical readout of the real-time magnetic field pattern associated with high frequency and ultra high density recording is reliably achieved.